

383

PATENT
Attorney Docket No. 7372/70988

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

MAEKAWA, Tomohiro

Art Unit: 1773

Application No.: 09/161,283

Examiner: K. Kruer

Filed: September 28, 1998

For: LAMINATED EXTRUDED RESIN
SHEET

RECEIVED
JUN 26 2001
JUN 21 2001
TC 1700

**NOTICE OF APPEAL FROM THE
EXAMINER TO THE
BOARD OF PATENT APPEALS AND INTERFERENCES**

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

To the Board of Patent Appeals and Interferences from the decision of the Examiner mailed May 31, 2001.

The items checked below are appropriate:

1. Status of

This application is on behalf of ☒ other than a small entity or ☐ a small entity.

2. Fee for Filing Notice of Appeal

Pursuant to 37 CFR 1.17(b), the fee for filing the Notice of Appeal is for: ☒ other than a small entity or ☐ a small entity.

Notice of Appeal Fee due \$0.00 - Previously paid March 14, 2001

3. Extension of Time

☐ for a extension of time under 37 CFR 1.136, the fee for which is .

In re Appln. of MAEKAWA
Application No. 09/161,283

- ☐ An extension for has already been secured and the fee paid therefor of is deducted from the total fee due for the total amounts of extension now requested.
- ☒ NO extension of time is required. However, this conditional petition is being made to provide for the possibility to charge our Deposit Account No. 06-1135, Order No. 7372/70988, if inadvertently overlooked the need for a petition and fee for extension of time.

Extension fee due with this request: \$

4. **Total Fee Due**

The total fee due is:

Notice of Appeal Fee	\$
Extension Fee (if any)	\$

Total Fee Due: \$0.00

5. **Fee Payment**

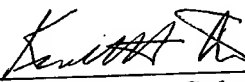
- ☐ Attached is a check in the sum of \$.
- ☐ Charge Account No. 06-1135 the sum of \$. A duplicate of this transmittal is attached.

6. **Fee Deficiency**

- ☒ If any additional fee is required in connection with this communication, charge Account No. 06-1135. A duplicate of this transmittal is attached.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

By: 
Kendrew H. Colton
Registration No. 30,368

FITCH, EVEN, TABIN & FLANNERY
1801 K Street, N.W.
Suite 401L
Washington, D.C. 20006-1201
Telephone No. (202) 419-7000
Facsimile No. (202) 419-7007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of

MAEKAWA

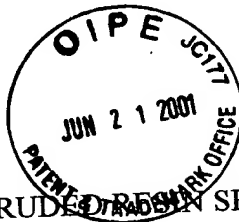
Appln. No.: 09/161,283

Filed: September 28, 1998

Title: LAMINATED EXTRUDED SHEET

Group Art Unit: 1773

Examiner: K.Kruer



* * * * *

June 21, 2001

SUBSTITUTE APPEAL BRIEF

Hon. Commissioner of Patents
and Trademarks
Washington, DC 20231

Sir:

Please enter this Substitute Appeal Brief pursuant to 37 CFR 1.192. All fees for filing a brief were previously paid. If any additional fees are necessary to ensure consideration of this Substitute Appeal Brief, please charge them to our deposit account per the cover sheets hereto regarding our Order No. 7372/70988.

(1) Real Party in Interest

The real party in interest is Sumitomo Chemical Co., Ltd.

(2) Related Appeals and Interferences

As presently informed there are neither related pending appeals nor interferences.

(3) Status of Claims

Claims 1, 2, 5, 8-12, 15 and 16 are presented on appeal.

Claims 3, 6 and 7 have been canceled previously.

Claim 4 was canceled in the March 13, 2001 Amendment on Appeal.

Claims 13-14 were canceled in the March 13, 2001 Amendment on Appeal.

Claim 16 replaced claim 4 and claim 16 was presented in the March 13, 2001 Amendment on Appeal.

(4) Status of Amendments

The Amendment dated December 13, 2000 was not entered.

The Amendment on Appeal filed March 13, 2001 has been entered.

(5) Summary of the Invention

The present invention concerns a laminated extruded resin sheet comprised of a methyl methacrylate resin, and more particularly a laminated extruded resin sheet comprised of a methyl methacrylate resin which is subjected to secondary thermoforming and whereby a formed particle having a smaller bias of thickness is obtained. Specification, page 1, first paragraph. Thus, in general the present invention concerns a laminated extruded resin sheet comprised of a methyl methacrylate resin which may be produced by laminating resin layers (B) on both surfaces of a resin layer (A) by multi-layer extrusion molding. Specification, page 4, second paragraph. The resin layer (A) may be made as disclosed in the specification. Id. The resin layer (B) is disclosed as being made, for instance, by dispersing uniformly 1 to 50 parts by weight of an insoluble methyl methacrylate resin in particulate form in which the particles have a weight-average particle size of about 1 to about 100 μm based on 100 parts by weight of a base resin comprising a methyl methacrylate resin. Id. A resin layer (B) can

contain 0 to 70 parts by weight of a rubber-like polymer. Specification at page 11. When present, if the amount of a rubber-like polymer is over about 70 parts by weight, the surface of the sheet plate may be softened, and easily scratched. Specification, page 8.

In a preferable embodiment, the laminated extruded resin sheet of the invention has at least a three-layer structure in which surface layers contain methyl methacrylate resin particles. Specification throughout, and note pages 4 *et seq.* plus the original claims, in combination with the discussion at page 11.

The present at least three-layer structure yields a thermoformed article having a smaller bias of thickness in comparison to one-layer or two-layer structures. Specification throughout, and note page 11. This is borne out upon perusal of the present examples versus the comparative examples. Specification, pages 16-25.

Thus, in one claimed embodiment, a laminated extruded resin sheet comprised of which is produced by laminating resin layers (B) on both surfaces of a resin layer (A) by a multilayer-extrusion molding method. The resin layer (A) comprises a methyl methacrylate resin. The resin layers (B) being made by dispersing uniformly 1 to 50 parts by weight of insoluble methyl methacrylate resin particles having a weight-average particle size of 1 to 100 μm based on 100 parts by weight of a base resin comprising a methyl methacrylate resin. Specification, throughout, and particularly in summary form, at page 4. A multi-layered structure can include a B/A/B three-layered element, wherein the three-layered element achieves a lower bias of thickness in the formed article, is disclosed in the specification throughout, especially page 11.

In a claimed embodiment, in the laminated extruded resin sheet comprising a methyl

methacrylate resin, the resin contains 50% by weight or more of a methyl methacrylate polymer or a copolymer comprising 50% by weight or more of methyl methacrylate unit and a monofunctional unsaturated monomer unit as a constituent unit. This is described in the specification at page 5, for instance.

In a claimed embodiment, in the laminated extruded resin sheet comprising a methyl methacrylate resin, the insoluble methyl methacrylate resin particles can be methyl methacrylate resin particles having a weight-average molecular weight of 500,000 to 5,000,000 or a cross-linked methyl methacrylate resin particle. This is described in the specification at page 9, for instance.

In another claimed embodiment, in the laminated extruded resins sheet comprising a methyl methacrylate resin, the a difference of a ratio of the methyl methacrylate monomer unit constituting a base resin and a ratio of the methyl methacrylate monomer unit constituting the resin particle does not exceed 30%. This is described in the specification at pages 10-11, for instance.

In another claimed embodiment, in the laminated extruded resin sheet, the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 70 parts by weight of a rubber-containing polymer.

In a further embodiment, in the laminated extruded resin sheet, the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 50 parts by weight of a rubber-containing polymer. This is described in the specification at page 8, for instance.

In another claimed embodiment, in the laminated extruded resin sheet, the resin layer (A) is made by dispersing uniformly 3 to 50 parts by weight of a rubber-containing polymer

into 100 parts by weight of a methyl methacrylate resin, and the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 70 parts by weight of a rubber-containing polymer. This is described in the specification throughout, and attention is directed, for example, to pages 8-9.

In another claimed embodiment, in the laminated extruded resin sheet, the resin layer (A) is made by dispersing uniformly 3 to 20 parts by weight of a rubber-containing polymer into 100 parts by weight of a methyl methacrylate resin, and the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 50 parts by weight of a rubber-containing polymer. This is described in the specification throughout, especially at page 11.

In a further claimed embodiment, in the laminated extruded resin sheet, the rubber-containing polymer is a graft copolymer obtained by graft-polymerizing 5 to 80 parts by weight of rubber with 95 to 20 parts by weight of an ethylenically unsaturated monomer. This is described in the specification throughout, especially at page 6.

(6) Issues

The issues are re-stated in an amended form since the March 13, 2001 Amendment on Appeal was entered, which mooted certain of the previously recited issues. The rejection as to canceled claims 13 and 14 is moot. The objection as to former claim 4 has been withdrawn (Advisory Action March 21, 2001) in view of new entered claim 16.

Therefore, the issues presently on appeal are:

(a) Whether original claim 2 satisfies 35 U.S.C. §112 (¶2), i.e., whether a rejection made for the first time in the Final Rejection dated June 26, 2000 should be reversed.

(b) Whether each of claims 1, 2, 5, 8-12, 15 and 16 defines an unobvious invention?

(7) **The claims Do Not Stand or Fall Together**

The claims do not stand or fall together.

(8) **Argument**

The Argument section will address the prior art rejection and the formality rejection of claim 2.

A. **Claims 1, 2, 5, 8-12, 15 and 16 Define Unobvious Inventions.**

Applicant respectfully submit claims 1, 2, 5 8-12, 15 and 16 each define novel unobvious inventions over the combination of Hatakeyama et al. (U.S. Patent No. 5,804,287) in view of Visser (U.S. Patent No. 5,851,606).

Claim 1 would have been unobvious to a person of ordinary skill in the art.

One embodiment of the present invention has a three-layer structure in which surface layers contain methyl methacrylate resin particles. The present invention broadly relates to a laminated extruded resin sheet comprising a methylmethacrylate resin, which is comprised of at least three layers. A multilayer extrusion molding method can be used to laminate resin layers (B) on both surfaces of a resin layer (A). The resin layer (A) comprises a methyl methacrylate resin. The resin layer (B) is made by dispersing uniformly 1 to 50 parts by

weight of insoluble methyl methacrylate resin particles having a weight-average particle size of 1 to 100 μm based on 100 parts by weight of a base resin comprising a methyl methacrylate resin.

The layered structure is pertinent and particularly a structure including a B/A/B element. Specification at page 11. A molded layer having a smaller bias of thickness is not obtainable by secondary thermoforming a two-layered structure according to the Comparative Examples in the present application. This is apparent from comparison of Example 4 with Comparative Example 1 in the present specification. This can be summarized as in the following table.

	Layer constitution mm	Resin layer (A)			Resin layer (B)			Maximum difference mm
		Resin		Particle	Resin		Particle	
		PMMA parts	Rubber-like polymer parts	Amount of dispersion parts	PMMA parts	Rubber-like polymer parts	Amount of dispersion parts	
Ex. 4	three layers 0.2/2.6/0.2	100	25	0	100	0	13	1.069
Comp. Ex. 1	two layers 0.2/2.8	100	25	0	100	0	13	2.062

The broader aspects of the claimed invention are not disclosed in the Hatakeyama et al. ('287) reference, as stands admitted in the record, for instance:.

- “Applicants ... argue that Hatakeyama does not teach a three-layered film. The examiner agrees with the Applicants interpretation of the reference.” November 20, 2000 Advisory Action, page 3, lines 4 – 5.
- “Applicants further argue that Hatakeyama does not teach the presence of methyl methacrylate resin particles. The examiner agrees with Applicant’s interpretation.” November 20, 2000, Advisory Action, page 2, last paragraph.
- Hatakeyama et al. also admittedly “do not specifically state that ... the resin layer (i.e., layer A) contains the rubber-containing polymer.” June 26, 2000 Final Rejection, page 5, lines 1-2.
- Hatakeyama et al. further admittedly “do not specifically state that the acrylic film (i.e., layer B) contains methyl methacrylate resin particles.” June 26, 2000 Final Rejection, page 5, lines 1-2.

Thus, at the outset the Examiner agrees that there are a number of distinct differences between the claim 1 embodiment and the Hatakeyama et al. reference.

The Examiner seems to believe that *any* article is a sheet. November 20, Advisory Action at page 2. It is respectfully submitted the Hatakeyama reference does not disclose a sheet per se. An Affidavit from the Examiner is and was in order.

Nonetheless, the Examiner opines that it would have been obvious to laminate the acrylic films on both sides of the resin layer. June 26, 2000 Final Rejection, page 7, lines 1-

2. There is no such teaching cited by the Examiner from the Hatakeyama et al. reference. Instead, in Hatakeyama et al., the acrylic film with a one-layer structure is vacuum molded in a mold; a base resin such as ABS resin or PC resin is successively injected to the mold; and a molded article in which the acrylic film is on one surface of the article of the base resin is obtained. Consequently the Examiner admits on the one hand that the Hatakeyama et al. reference does not teach the layered structure according to claim 1 and all claims depending therefrom, yet on the other hand opines it's obvious. The latter conclusion is conflicts with both the Hatakeyama et al. reference, and the Examiner's earlier admission that "Applicants interpretation of the reference" is correct.

Nonetheless, the Examiner further opines that it would have been obvious to laminate the acrylic films as stated above "given the expectation of equivalent results and particularly in the absence of a showing of criticality." June 26, 2000 Final Rejection, page 7, lines 1-2. That seems to be an *ipse dixit*. The Examiner has again not cited any passage from the Hatakeyama et al. reference that would have motivated the person of ordinary skill in the art to do so. If this thesis is one from the Examiner's own ken, then it was and still is incumbent to upon the Examiner to supply an Examiner's Affidavit or an Examiner's Declaration. Otherwise, the thesis collapses for want of a factual predicate.

The secondary Visser reference has not been cited by the Examiner as teaching the at least three layered structure. Therefore, the secondary reference does not supply a teaching that supports the Examiner's motivation argument. The secondary art cited neither supports the combination of the two references, nor the Examiner's proposed modification of the primary reference. Accordingly, even if the two references would have been combined,

which they wouldn't have been, the combined teaching would not have taught the claim 1 invention, nor the inventions of any of the dependent claims, whether pending or canceled for purposes of this Appeal.

Indeed, the secondary Visser ('606) reference would seem to support patentability, not the converse. It discloses a marble-like acrylic resin sheet having one-layer structure that is used for a bath tub and the like. This acrylic resin sheet is produced by a casting method in which the monomer mixture is poured into a flat glass mold and polymerized to form a sheet. In Visser, the acrylic resin sheet is thermoformed to a shaped article such, as a bathtub, and a mixture of glass fibers and liquid polyester resin is sprayed onto the outer surface of the bathtub in order to reinforce the overall strength of the shaped article.

The face sheet for the bathtub and the rough back-side with fibers would not have suggested modifying the Hatakeyama et al. reference to provide a multi-layered structure, e.g. a structure including at least three layers with the defined layer (A) and layers (B). The Examiner's contrary assertion in the November 20, 2000 Advisory Action (page 3) does not find a basis in the cited art. Indeed, the Examiner has already acknowledged that:

Applicants also argue that Hatakayama does not teach a three-layered film. The examiner agrees with Applicants interpretation of the reference.

November 20, 2000 Advisory Action, page 3. Since the secondary reference teaches a back surface having fibers (back side of bath tub), there would have been no motivation to modify the primary reference.

Furthermore, the Visser reference teaches against its combination with the Hatakayama reference. It appears to teach combining small amounts of particles with liquid

acrylic matrix and requires a differential settling and concentration of the particles in the lower half (part) of a mold. That would not have motivated a person of ordinary skill in the art to combine Visser with the primary reference, nor would it have motivated a person of ordinary skill in the art to the claimed invention.

Thus, since the prior art (a) would not have been combined; and (b) even if combined, it would not have taught the claimed invention, the rejection should be reversed. In short there is no *prima facie* case of obviousness whereby the rebuttal evidence sought in the Advisory Action (November 20, 2001) at page 3 is unnecessary, but is present in any event in the specification throughout including the Examples at pages 14-25.

Claim 2 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references.

Claim 2 depends from claim 1 and defines the laminated extruded resin sheet as comprising a methyl methacrylate resin wherein the methyl methacrylate resin contains 50% by weight or more of a methyl methacrylate polymer or a copolymer comprising 50% by weight or more of methyl methacrylate unit and a monofunctional unsaturated monomer unit as a constituent unit.

The claim would not have been obvious to a person of only ordinary skill in the art for the reasons stated above as to claim 1.

In addition, Applicants point out that the Examiner has already recognized that Hatakeyama et al. "do not specifically state that the acrylic film (i.e. layer B) contains methyl methacrylate resin particles or that the resin layer (i.e., layer A) contains rubber-containing

polymer.” June 26, 2000 Final Rejection, page 5. It necessarily follows that the Hatakeyama et al. reference does not teach the at least three layered structure, as the Examiner has admitted. Next, it necessarily follows that the Visser references does not teach the at least three layered structure as there is no mention of Visser for such a structure in the Final Rejection. Therefore, even if one of the references allegedly disclosed an element of claim 1 or part of an element of claim 2, the fact is that (a) the references would not have been combined, and (b) even if combined would not have taught the claim 2 invention to a person of only ordinary skill in the art.

**Claim 16 (= Former Claim 4) would have been unobvious
To a person of only ordinary skill in the art over
the Hatakeyama et al. and Visser references.**

Claim 16 depends from claim 1. It defines a laminated extruded resin sheet comprising a methyl methacrylate resin, wherein the insoluble methyl methacrylate resin particles are methyl methacrylate resin particles having a weight-average molecular weight of 500,000 to 5,000,000 or cross-linked methyl methacrylate resin particles.

In addition to the reasons stated above as to claims 1 and 2, claim 16 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references because the primary reference does not teach the multi-layered structure including a defined layer A and layers B, in which the insoluble particles are as in claim 4. The Examiner’s thesis is that the secondary reference to Visser discloses such particles and therefore dependent claim 16 would have been obvious. The Examiner cites no passage in Visser for the layer A and layers B (multi-layer structure containing layers B and layer A).

The Examiner cites no passage from the primary reference for such a structure. Particles in a two-layer structure – *arguendo* only – would not have suggested the claimed laminate resin structure. Since there is no prior art cited teaching of an at least three layer structure, i.e. layers B and a layer A for instance, it follows that the prior art would not have suggested an at least three-layer structure in which the resin particles can have a weight average molecular weight of 500,000 to 5,000,000 or are crosslinked.

Claim 5 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references.

Claim 5 depends from claim 1. It defines the laminated extruded resinous sheet as comprising the base methyl methacrylate resin of claim 1 in which there is a difference of a ratio of the methyl methacrylate monomer unit constituting a base resin and a ratio of the methyl methacrylate monomer unit constituting the resin particle does not exceed 30%. According to the specification, when the difference is greater than about 30%, the bias of thickness of the molded article in effecting secondary thermoforming may sometimes be lowered. Specification at page 11.

In addition to the reasons stated above as to claims 1, 2 and 16, claim 5 would have been unobvious to a person of only ordinary skill in the art because neither the Hatakeyama et al. nor the Visser references would have suggested an at least three layer structure in which the laminated extruded resinous sheet comprises the base methyl methacrylate resin of claim 1 in which there is a difference of a ratio of the methyl methacrylate monomer unit constituting a base resin and a ratio of the methyl methacrylate monomer unit constituting the resin particle does not exceed 30%.

It appears that the Examiner is ignoring this lacuna in the prior art. The Examiner has opined that it would have been obvious to make the at least three layered structure, which Applicants point out is not taught in the prior art, and that it would have been obvious to optimize the thickness of each layer and the concentration of each component by routine experimentation. Final Rejection, page 6, lines 7-9.

The Applicants submit that their defined extruded laminate resin sheet would not have been taught by the references, whether taken singly or in combination. Applicants do not agree that the references would have been combined.

The Examiner's reliance on "routine experimentation" contradicts the statute. By act of Congress, Title 35 United States Code Section 103 expressly directs that an invention shall not be negated by the manner in which it is made. The CCPA decision of *In re Fry*, 347 F.2d 597, 602 (CCPA 1965) is directly relevant as it reversed an obviousness rejection predicated on naked "routine experimentation." In addition, there is no prior art inspired reason to assume "equivalent" results." The absence of a factual predicate negates the conclusion of obviousness, and vitiates basis, if any, for rote reliance on "routine experimentation" in any event.

The Examiner's reliance on "optimization" is unclear, legally and factually for further reasons. If the Examiner seeks to invoke the alleged "optimization" rule, then the rejection should be reversed for the additional reason that the features in claim 5 are variables that the prior art does not appear to have identified as result effective variables. *See, e.g. In re Waymouth*, 182 U.S.P.Q. (BNA) 290 (CCPA 1974), *In re Antonie*, 195 U.S.P.Q. (BNA) 5 (CCPA 1977). The so-called "optimization rule" – if there even is such a rule – is simply not pertinent when the point is that the very variable being considered is not specifically taught in

the prior art as a variable on which to focus. *See, e.g., In re Rijkaert*, 28 U.S.P.Q. 2d (BNA) 1955 (Fed. Cir. 1993); *In re Antonie*, 195 U.S.P.Q. (BNA) at 8-9. Since the relation in claim 5 is not disclosed in the references, the references cannot suggest how one might provide the improved results. Accordingly, "optimization" is an unsupported red herring.

The rejection should be reversed.

Claim 8 would have been unobvious to a person of only ordinary skill in the art over the Hatakaya and Visser References.

Claim 8 defines a novel and unobvious invention. The ratio is relevant because when the thickness of a B layer is too thin, the bias thickness of the article obtainable therefrom is not lowered. On the other hand, when an A layer is too thin, other issues arise, such as costs. The references would not have been combined, nor would there have been a prior art motivated reason to combine them. Neither reference teaches a structure containing a three-layer component (B/A/B) as stands admitted on the record. Neither reference teaches a ratio of B/A/B as in claim 8. The rejection should be reversed.

Claim 9 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references.

Claim 9 depends from claim 1. Claim 9 defines the laminated extruded resin sheet according to Claim 1 with the feature that the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 70 parts by weight of a rubber-containing polymer.

In addition to the reasons stated as to claims 1, 2, 5, 8 and 16, claim 9 would have been unobvious because the prior art would not have suggested an at least three-layer

structure, including a B/A/B structure it follows that the limitation of claim 9 would not have been suggested. Moreover, Applicants specifically point out that it is improper to pick and choose only so much of a reference as will support a conclusion, and that it is equally improper to ignore claim limitations which are admittedly not disclosed in the references even when they are combined.

Claim 10 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references.

Claim 10 depends from claim 1. Claim 10 defines the laminated extruded resin sheet according to Claim 1 in which the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 50 parts by weight of a rubber-containing polymer.

Claim 10 would have been unobvious to a person of ordinary skill in the art for the reasons stated above as to claims 1, 2, 5, 8, 9 and 16.

Claims 11 and 12 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references.

Claim 11 depends from claim 1. Claim 11 defines the laminated extruded resin sheet according to Claim 1 in which the resin layer (A) is made by dispersing uniformly 3 to 50 parts by weight of a rubber-containing polymer into 100 parts by weight of a methyl methacrylate resin, and the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 70 parts by weight of a rubber-containing polymer.

Claim 12 also depends from claim 1 and defines the laminated extruded resin sheet in which the resin layer (A) is made by dispersing uniformly 3 to 20 parts by weight of a

rubber-containing polymer into 100 parts by weight of a methyl methacrylate resin, and the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 50 parts by weight of a rubber-containing polymer. The specification details the advantages of a claim 12 embodiment, page 11.

Claims 11 and 12 would have been unobvious to a person of only ordinary skill in the art for the reasons stated for claims 1, 2, 5, 8, 9 and 10. It is not seen that an element, even if it alone is in the prior art, to an otherwise novel combination renders the combination obvious. The rejection should be reversed.

Claim 15 would have been unobvious to a person of only ordinary skill in the art over the Hatakeyama et al. and Visser references.

Claim 15 is multiply dependent from any one of Claims 9, 10, 11 or 12. It defines the resin laminate in which the rubber-containing polymer is a graft copolymer obtained by graft-polymerizing 5 to 80 parts by weight of rubber with 95 to 20 parts by weight of an ethylenically unsaturated monomer.

It is respectfully submitted that claim 15 would not have been obvious for the reasons stated above as to claims 1, 2, 5, 8, and 9-12.

B. **Claim 2 Complies with 35 U.S.C. §112 (¶2)**

Claim 2 (original) was finally rejected for the first time in the June 26, 2000 Office Action. The prior formality rejection in the December 28, 1999 Office Action presented no specific comments directed to claim 2. In the first Office Action dated December 28, 1999 only claims 1, 3, 4, 6 and 7 were mentioned on a claim-by-claim basis. The first Office

Action stated "the language of the above mentioned claims must be amended to clarify what is meant to be encompassed by the claims." (emphasis added). Claim 2 was not mentioned.

The Examiner's final rejection presented the first specific rejection of claim 2 under §112 (¶2). The Examiner wonders whether the "methylemethacrylate resin" refers to layer (A), the base resin comprising a methylemethacrylate or both.

The point here is that original claim 2 was part of the original disclosure, and is therefore self-descriptive, see also specification, page 9 lines 9-15 and see the specification at page 5, after "Detailed Description of the Invention." Those persons who are skilled in the art would know the metes and bounds of claim 2.

There is nothing indefinite about claim 2 when read -- as required -- in view of the specification.

The rejection should be reversed.

In re Application of MAEKAWA

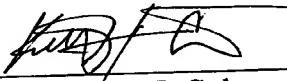
Application No. 09/161,283

(9) Conclusion

- (1) Please reverse the obviousness rejection of claims 1, 2, 5 and 8-12, 15 and 16.
- (2) Please reverse the formality rejection of claim 2 under 35 U.S.C. §112 (¶2)

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

By: 
Kendrew H. Colton
Registration No. 30,368
Telephone No. (202) 419-7000
Facsimile No. (202) 419-7007

Fitch Even Tabin & Flannery
1801 K Street NW
Suite 401L
Washington, DC 20006-1201

June 21, 2001

APPENDIX

The claims on appeal are presented after taking into account entry of the March 13, 2001 Amendment on Appeal.

1. A laminated extruded resin sheet comprising a methyl methacrylate resin produced by laminating resin layers (B) on both surfaces of a resin layer (A) by a multilayer-extrusion molding method, the resin layer (A) comprising a methyl methacrylate resin, and the resin layer (B) being made by dispersing uniformly 1 to 50 parts by weight of insoluble methyl methacrylate resin particles having a weight-average particle size of 1 to 100 μm based on 100 parts by weight of a base resin comprising a methyl methacrylate resin.
2. The laminated extruded resin sheet comprising a methyl methacrylate resin according to Claim 1, wherein the methyl methacrylate resin is a resin containing 50% by weight or more of a methyl methacrylate polymer or a copolymer comprising 50% by weight or more of methyl methacrylate unit and a monofunctional unsaturated monomer unit as a constituent unit.
5. The laminated extruded resins sheet comprising a methyl methacrylate resin of claim 1, wherein the a difference of a ratio of the methyl methacrylate monomer unit constituting a base resin and a ratio of the methyl methacrylate monomer unit constituting the resin particle does not exceed 30%.

8. The laminated extruded resin sheet comprising a methyl methacrylate resin according to Claim 1, wherein the layer thickness ratio [resin layer (B)/resin layer (A)/resin layer (B)] is from 1/200/1 to 1/1/1.

9. The laminated extruded resin sheet according to Claim 1, wherein the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 70 parts by weight of a rubber-containing polymer.

10. The laminated extruded resin sheet according to Claim 1, wherein the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 50 parts by weight of a rubber-containing polymer.

11. The laminated extruded resin sheet according to Claim 1, wherein the resin layer (A) is made by dispersing uniformly 3 to 50 parts by weight of a rubber-containing polymer into 100 parts by weight of a methyl methacrylate resin, and the base resin comprises 100 parts by weight of a methyl methacrylate resin and 5 to 70 parts by weight of a rubber-containing polymer.

12. The laminated extruded resin sheet according to Claim 1, wherein the resin layer (A) is made by dispersing uniformly 3 to 20 parts by weight of a rubber-containing polymer into 100 parts by weight of a methyl methacrylate resin, and the base resin

comprises 100 parts by weight of a methyl methacrylate resin and 5 to 50 parts by weight of a rubber-containing polymer.

15. The laminated extruded resin sheet according to Claim 9, 10, 11 or 12, wherein the rubber-containing polymer is a graft copolymer obtained by graft-polymerizing 5 to 80 parts by weight of rubber with 95 to 20 parts by weight of an ethylenically unsaturated monomer.

16. The laminated extruded resin sheet comprising a methyl methacrylate resin according to Claim 1, wherein the insoluble methyl methacrylate resin particle is a methyl methacrylate resin particle having a weight-average molecular weight of 500,000 to 5,000,000 or a cross-linked methyl methacrylate resin particle.